NEWSLINE YEAR IN REVIEW

2022

LAWRENCE LIVERMORE NATIONAL LABORATORY

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Lawrence Livermore National Laboratory: A year for the record books

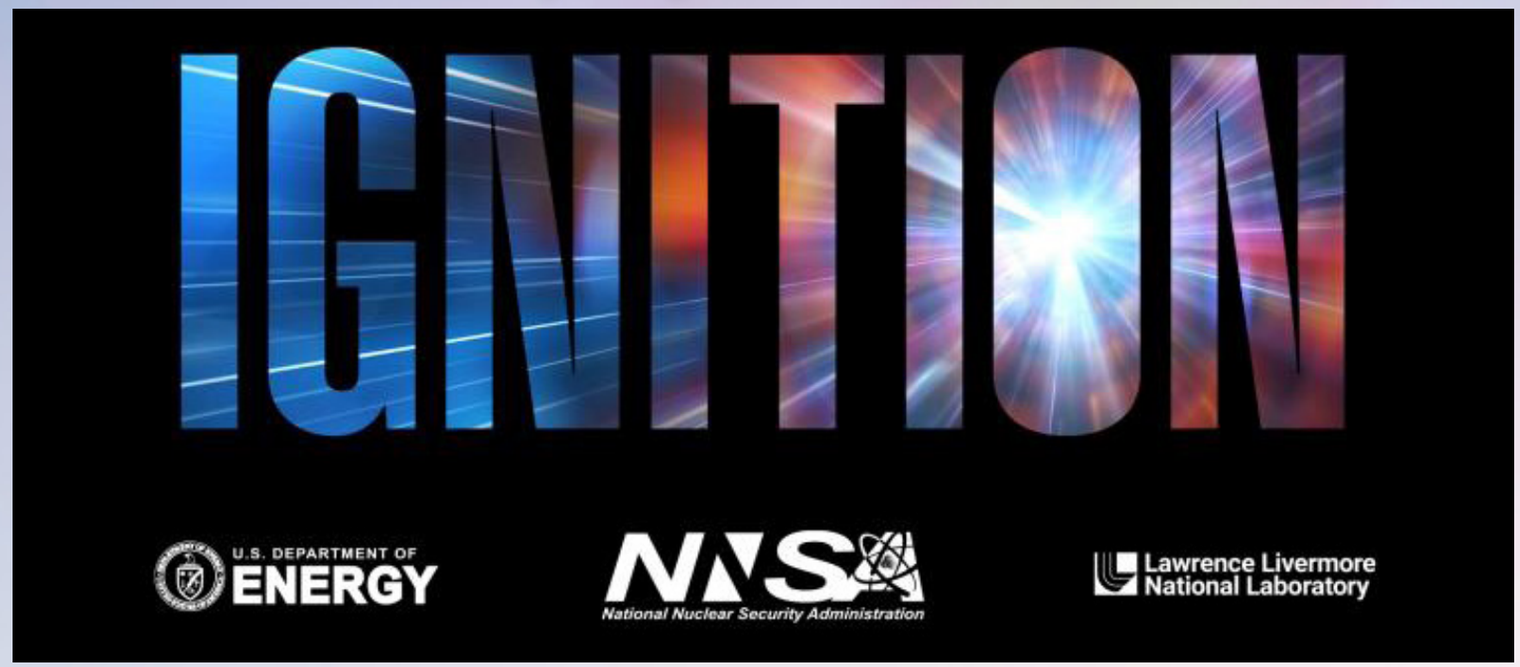
Ending with one of the most significant achievements in scientific history, 2022 will be remembered as an important year for Lawrence Livermore.

On Dec. 5, in the Lab's 50th year of laser programs, LLNL's National Ignition Facility (NIF) achieved fusion ignition for the first time in a laboratory setting: a reaction that produced more energy than laser energy used to create it.

The Lab, the U.S. Department of Energy (DOE) and the National Nuclear Security Administration (NNSA) announced the feat a week later, heralding a major scientific breakthrough decades in the making and captivating the world.

This was also a year of celebrating "making the impossible possible" as LLNL marked seven decades of team science, audacious ideas and pushing the extremes. More than 5,000 Lab employees gathered to celebrate LLNL's 70th anniversary during the first-ever Employee Engagement Day. Dozens of the Lab's facilities and programs opened their doors for employees to get a closeup look at LLNL's cutting-edge science and technology while connecting with colleagues.

This was truly a year for the record books, full of scientific discovery, technological innovation, pioneering programs and personnel excellence. For a comprehensive look back at the Lab's accomplishments in 2022, read on for a month-by-month review.



INSIDE YEAR IN REVIEW

More than 5,000 Lab employees gathered to celebrate the Lab's 70th anniversary.

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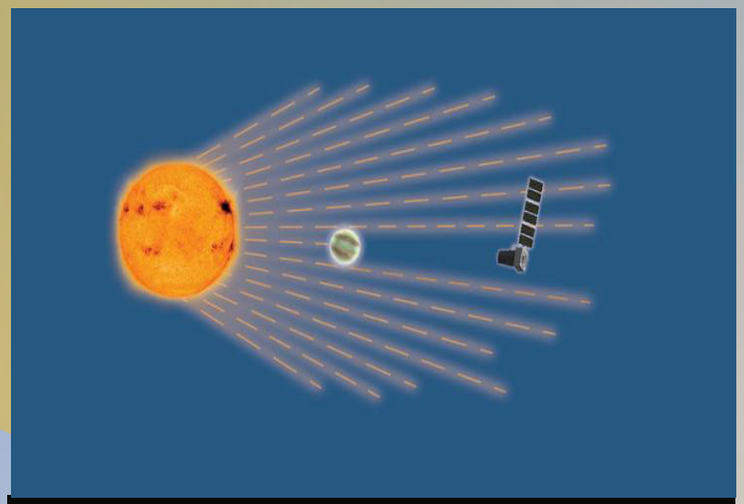

An illustration of Pandora studying an exoplanet's atmosphere as it passes in front of its host star using transit spectroscopy. LLNL begins building the small satellite that was recently approved to continue toward flight after a concept study. Graphic by LLNL and NASA's Goddard Space Flight Center.

"This is a huge step because, while it's a small satellite, Pandora will deliver impactful science for NASA's astrophysics program. And we're doing it efficiently, under unprecedented budget constraints for mission-quality science."

– Ben Bahney,
LLNL's program leader for Space Science and Security

JANUARY

SCIENCE AND TECHNOLOGY

Wildfires and prescribed burns, which can promote soil organic matter stability, may be an important nature-based climate solution to increase long-term carbon storage. This is the conclusion of an international team of researchers, including a scientist from LLNL, who are looking at the effect of wildfires and prescribed burns on the global carbon cycle.
Read more

LLNL researchers and a multi-institutional team of scientists develop a highly detailed, machine learning-backed multiscale model revealing the importance of lipids to the signaling dynamics of RAS, a family of proteins whose mutations are linked to numerous cancers.
Read more

The Pandora mission, co-led by LLNL and NASA's Goddard Space Flight Center, moves forward after passing a crucial step on its path to study stars and planets outside our solar system, or exoplanets. After a successful concept study report and system requirements review, NASA approves the mission to continue toward flight.
Read more

The discovery of more than 4,500 extra-solar planets creates a need for modeling their interior structure and dynamics. As it turns out, iron plays a key role. LLNL scientists and collaborators use lasers at the National Ignition Facility (NIF) to experimentally determine the high-pressure melting curve and structural properties of pure iron up to 1,000 GPa (nearly 10,000,000 atmospheres).
Read more

Scientists from LLNL and three other institutions seek to develop a multi-pathogen vaccine that will protect against three bacterial biothreat pathogens. The researchers collaborate under a five-year, $10-million grant from the Defense Threat Reduction Agency and aim to develop a single vaccine that will protect against tularemia, melioidosis and plague.
Read more

New research conducted at LLNL explores the expansion of a classical mechanics model, which has been useful for understanding asymmetries in inertial confinement fusion implosions, from a two-piston to a six-piston model to capture higher-mode asymmetries.
Read more

LLNL's work on consumables for COVID-19 testing is highlighted in a special issue of the *Materials Research Society Bulletin*, focusing on materials science innovation in response to the pandemic. The issue includes an article from a Lab team led by Microfabrication Research and Development Engineer Angela Tooker on testing COVID-19 nasopharyngeal swabs.
Read more

LLNL scientists in collaboration with San Francisco State University and The Pennsylvania State University develop a broad suite of multiscale simulation capabilities to help identify, assess and overcome microstructural impacts on ion transport in solid electrolytes.
Read more

LLNL scientists develop a custom microscope to image microbes in soil and plants at the micrometer scale. Live imaging of microbes in soil will help scientists understand how soil microbial processes occur on the scale of micrometers, where microbial cells interact with minerals, organic matter, plant roots and other microorganisms.
Read more

After decades of fusion research, scientists at LLNL's National Ignition Facility (NIF) achieve a burning plasma

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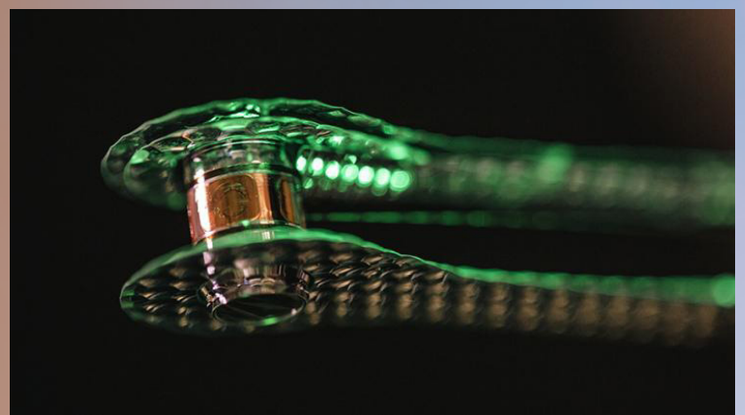

A cryogenic target used for experiments producing burning plasma conditions. Photo by Jason Laurea/ Lawrence Livermore National Laboratory.

"Fusion experiments over decades have produced fusion reactions using large amounts of 'external' heating to get the plasma hot. Now, for the first time, we have a system where the fusion itself is providing most of the heating. This is a key milestone on the way to even higher levels of fusion performance."

– LLNL physicist Alex Zylstra

state. Obtaining a burning plasma is a critical step toward self-sustaining fusion energy.
Read more

LLNL's National Ignition Facility (NIF) achieves a burning plasma state. The work, focusing on the designs that led to these results, is featured in the Jan. 26 issue of *Nature* titled "Design of inertial fusion implosions reaching the burning plasma regime," with LLNL physicists Annie Kritcher and Chris Young serving as lead authors.
Read more

LLNL researchers explore alternative treatment options when antibiotics fail. Certain naturally occurring clay deposits harbor antimicrobial properties and kill antibiotic-resistant bacteria. These clays serve as a new paradigm for fighting the potentially devastating effects of the post-antibiotic era.
Read more

PEOPLE

With a focus on increasing joint research efforts between LLNL and universities, the Lab's Weapon Physics and Design Academic Collaboration Team University Program (ACT-UP) presents this year's ACT-UP awards. Now in its third year, the ACT-UP awards encourage and advance strategic partnerships among universities with a focus on the Lab's mission.
Read more

LLNL physicist Richard Klein is honored as a 2022 fellow of the American Astronomical Society. He is recognized "for broad and influential contributions to computational astrophysics, for scientific achievements on radiatively-driven stellar winds and star formation theory and for training a generation of students and postdoctoral scholars."
Read more

Larry Durham is named LLNL's new associate director for Human Resources.
Read more

LLNL's Christopher Stolz becomes a fellow of SPIE, the international society for optics and photonics.
Read more

The Oppenheimer Science and Energy Leadership Program selects LLNL computer scientist Kathryn Mohror and materials scientist T. Yong Han as 2022 fellows. Established in 2017, OSELP is a distinguished fellowship program.
Read more

The Innovation Tri-Valley Leadership Group, a partnership working to advance the region's business climate and quality of life, announces that LLNL's Beth McCormick will co-chair its new Diversity, Equity and Inclusion Council.
Read more

When Kathy Brown joined the Civil Air Patrol more than a decade ago, she never thought she would help save someone's life. But that's something she and other members of her team did. For her efforts, the LLNL employee receives a certificate of recognition and a lifesaving ribbon with a silver star during the Civil Air Patrol's Tri-Valley Composite Squadron 156 ceremony at the Livermore Airport.
Read more

The American Society for Precision Engineering announces that LLNL research engineer Robert Panas is the organization's new president-elect.
Read more

Bill Bruner is one of many veterans who has transitioned from a military career to one at LLNL. Veterans have proven to be an asset to the Laboratory

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LLNL has receives a Glassdoor Employees' Choice Award, recognizing the Best Places to Work in 2022.

"The resilience, flexibility and dedication of our employees have enabled tremendous mission and scientific accomplishments while also showing us new ways to get the job done in a rapidly changing environment. Our workforce is our greatest asset — what truly makes LLNL a great place to work."

–LLNL Director Kim Budil

and bring a unique background and skill set in service to the nation. Bruner joined LLNL in 2009.
Read more

OPERATIONS

The new *LLNL Hybrid Workplace Guide* debuts and is intended to provide information that helps all Lab employees successfully navigate the hybrid workplace, including terms and definitions related to hybrid work, workspace options, guidance on selecting a hybrid work schedule and more.
Read more

For the fourth consecutive year, LLNL is honored with a Glassdoor Employees' Choice Award, recognizing the Best Places to Work in 2022. The Employees' Choice Award, now in its 14th year, is based solely on the input of employees, who elect to provide anonymous feedback.
Read more

FEBRUARY

SCIENCE AND TECHNOLOGY

LLNL and ELI-Beamlines in the Czech Republic reach a major agreement that will build on their relationship. The Strategic Partnership Project agreement aims to enable the L3-HAPLS laser to operate at the petawatt level with a 10 Hz repetition rate for experiments. This will put ELI-Beamlines in a leading position among the world's laser facilities.
Read more

LLNL scientists take a unique approach to characterize the dynamics of micro and submicron bubbles using a unique movie-mode dynamic transmission electron microscopy system, which is specially built to image with short electron pulses generated by a highly tunable laser-pulse train.
Read more

LLNL, Penn State and University of Arizona researchers partner with industry collaborator Western Rare Earths to use a naturally occurring protein to extract and purify rare-earth elements from abundant, domestic ore-based feedstocks and waste materials without harming the environment.
Read more

The source of Earth's water has been a longstanding debate and LLNL scientists think they have the answer — and they find it by looking at rocks from the moon.
Read more

An LLNL team develops a comprehensive dynamic model of COVID-19 disease progression in hospitalized patients, finding that risk factors for complications from the disease are dependent on the patient's disease state.
Read more

New LLNL research analyzes 3D particle-laden, isotropic turbulence to develop an understanding of inertial particle dynamics from a kinetic energy perspective.
Read more

Managing and mitigating laser-induced damage to optics as laser beams propagate to the target represents a major cost for running the National Ignition Facility (NIF). Another damage mechanism stems from stimulated Brillouin scattering as light travels back from the target and with nearly the same wavelength as the incoming light.
Read more

LLNL scientists use molecular dynamics simulations to unveil and describe the dynamical behavior of dissolved metal ions and water — a key component of a corrosion puzzle. They introduce a new methodology to describe

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Lawrence Livermore's Lara Leininger and Al Churby have been selected as Department of Energy Project Leadership Institute 2022 cohort participants.

"This is an exciting period of growth and relevance for the DOE's national nuclear security enterprise — especially in explosives research."

– Lara Leininger, director of LLNL's Energetic Materials Center

the strength and nature of chemical bonding between rapidly moving ions in solution.
Read more

LLNL scientists provide input on Microsoft's pathway to become carbon negative by 2030. LLNL researchers build on their pivotal report "Getting to Neutral: Options for Negative Carbon Emissions in California," which has become a trusted adviser in the discussion of how to remove carbon dioxide from the air, to make recommendations to Microsoft.
Read more

A team of LLNL leaders in the materials and manufacturing areas participates in a series of meetings in the United Kingdom as part of the Manufacturing and Materials Strategic Collaboration between the United States and the U.K.
Read more

A new paper by LLNL engineers argues that previous data suggesting a set of universal limitations in droplet-on-demand (DoD) printing has been surmounted by jetting liquid metals. Liquid metal jetting DoD printing is a new method of additive manufacturing that can fabricate complex parts while reducing waste.
Read more

PEOPLE

The Lab observes Black History Month by celebrating the contributions of Black Americans to our legacy of reaching new discoveries through cutting-edge research. Activities include the African American Body of Laboratory Employees (ABLE) See's Candies Fundraiser, an ABLE Lunch and Learn, an ABLE Black History Month jeopardy, guest speaker Professor Kimani Toussaint and ABLE Black History Month Private Virtual Wine Tasting Celebration with Longevity Wines.
Read more

Shian Warren, instruction designer/animator at the Lab, is featured in *Newsline* in honor of Black History Month to celebrate the contributions of Black Americans to our legacy of reaching new discoveries through cutting-edge science and technology.
Read more

The Society for Industrial and Applied Mathematics (SIAM) awards LLNL computational mathematician Rob Falgout with the 2022 SIAM Activity Group on Supercomputing Career Prize.
Read more

The Department of Energy Project Leadership Institute (PLI) selected LLNL's Lara Leininger and Al Churby as 2022 cohort participants. Members of the PLI cohort have demonstrated their expertise as technical, business systems or project leaders, with significant experience and responsibility for project or organization performance and resources.
Read more

OPERATIONS

Lawrence Livermore's popular lecture series, "Science on Saturday," goes virtual for 2022 with the theme "Energy and the Environment."
Read more

LLNL's Strategic Human Resources Management organization is re-named Human Resources.
Read more

Three LLNL biomedical scientists — from left, Matt Coleman, Angela Evans and Aimy Sebastian — are part of a team that finds new biomarkers that can be used for diagnostic purposes and potentially as predictive tools of the risks associated with deep-space flight.

"These kinds of studies are trying to fill the knowledge gaps to first understand the effects of working and traveling in low-Earth orbit and then of deep space on the human body."

– LLNL biomedical scientist Matt Coleman

Once again proving that it can rise to the challenge during a pandemic, the Laboratory receives an overall rating of very good in the Fiscal Year 2021 Performance Evaluation Report with the highest score among all of the National Nuclear Security Administration's labs, plants and sites.
Read more

MARCH

SCIENCE AND TECHNOLOGY

Research conducted at LLNL describes a validation exercise for simple models used to understand hot-spot conditions reached in an implosion, which find good agreement when compared to a set of simulations.
Read more

An international team of scientists, including three researchers from LLNL, finds new biomarkers that can be used for diagnostic purposes and potentially as predictive tools of the risks associated with deep-space flight.
Read more

Laboratory scientists and collaborators describe how living and dead microorganisms influence terrestrial biogeochemistry by forming and decomposing soil organic matter.
Read more

In findings that could help advance another "viable pathway" to fusion energy, research led by LLNL physicists proves the existence of neutrons produced through thermonuclear reactions from a sheared-flow stabilized Z-pinch device.
Read more

LLNL's National Ignition Facility (NIF) helps unravel the inner workings of heat conduction in clusters of galaxies — the largest structures in the universe.
Read more

LLNL and the University of California, San Francisco researchers look to identify cancer-related risks for poor outcomes from COVID-19. Analyzing one of the largest databases of patients with cancer and COVID-19, the team finds previously unreported links between a rare type of cancer — as well as two cancer treatment-related drugs — and an increased risk of hospitalization from COVID-19.
Read more

Lawrence Livermore is tapped to provide a key component of a major upgrade to SLAC National Accelerator Laboratory's Linac Coherent Light Source.
Read more

Lawrence Livermore ivermore researchers and their colleagues explore ways to build laser optics from plasma — a charged mixture of ions and free electrons — to overcome the energy density limits imposed by conventional solid optics.
Read more

LLNL scientists explore the interaction between cancer cells and the extracellular matrix— the "scaffolding" of organs — and find that proteins in the ECM can dramatically impact the immune system's ability to kill tumors. Researchers say the findings could represent a novel approach to studying immunosuppression found in many breast cancers and open new pathways of activating the immune system to target cancer.
Read more

LLNL scientists conduct machine-learning-driven atomistic simulations to provide insight into the fundamental processes controlling the formation

Alexis Massey transitioned from the United States Air Force to LLNL in 2020 through the Department of Defense's SkillBridge program. SkillBridge allows active-duty service members the opportunity to gain civilian work experience during their last several months of service.

"When I left for boot camp, I had no idea what my job was going to be. I took an open general contract that allowed the Air Force to pick a job for me based off test scores and my background. This led me to my incredibly rewarding specialty as a geospatial intelligence analyst."

– Alexis Massey

of nanocarbon materials, which could serve as a design tool, help guide experimental efforts and enable more accurate energetic materials modeling.
Read more

LLNL and the Y-12 National Security Complex team work to rapidly modernize legacy technology and production methods of crucial components for the U.S. nuclear deterrent, leading to the recent successful installation and testing of the electron beam cold hearth melter — a machine that can melt and cast various metals, including uranium alloys.
Read more

The White House Office of Science and Technology Policy and the Department of Energy host a first-of-its-kind summit, convening leaders in fusion from government, industry and academia to showcase the latest fusion achievements and technologies. They discuss an inclusive, equitable 10-year strategy for developing commercial fusion energy.
Read more

LLNL scientists simulate the hydrogen storage reactions in a promising material and discover why hydrogen uptake slows as the material absorbs hydrogen, providing insight that could be used for improvements.
Read more

PEOPLE

The LLESA Author Series and the Asian Pacific American Council (APAC) and Lawrence Livermore Lab Women's Association (LLLWA) host a virtual event featuring Ellen Wu, who discusses "How Asians Became America's Model Minority + Why That Matters."
Read more

LLNL celebrates Administrative Professionals Day by sending a thank you in *Newsline*.
Read more

LLNL celebrates the 2022 Global Women in Data Science (WiDS) conference with its fifth annual regional event, featuring workshops, mentoring sessions and a discussion with Lab Director Kim Budil, the first woman to hold that role.
Read more

LLNL features Alexis Massey as part of the veterans showcase series. Massey serves as an export licensing analyst in Global Security's Z Program where she conducts all-source research and end-user analysis in the area of nonproliferation and arms control on behalf of the Department of Energy for the Department of Commerce.
Read more

The Lab's engineering mentoring program generates rewarding opportunities for career growth and has yielded many rewarding matchups.
Read more

One current and two former LLNL scientists are inducted into the Laboratory's Entrepreneurs' Hall of Fame (EHF). The trio, who represent the third class of inductees into the Lab's EHF, are honored for developing technologies during or after their Lab careers that created major economic impacts or spawned new companies.
Read more

Lab Director Kim Budil celebrates with the Lab community the one-year anniversary of her taking the helm as Lab director, making history as the first woman to serve in the role.
Read more

Rajani Bansal, environmental engineer at LLNL in the Environmental Restoration Department in the Operations and Business Directorate, came to the Lab at the beginning of the pandemic in 2020.

"The Lab has always had a reputation of being a diverse workplace working on cutting-edge projects, so it is a place that I knew I would be able to thrive."

— Rajani Bansal, environmental engineer at LLNL

In honor of Women's History Month, LLNL celebrates the accomplishments, dedication and contributions of women at LLNL and highlights Rajani Bansal, environmental engineer at LLNL, via *Newsline* and social media.
Read more

LLNL's Brooke Buddemeier is named to the National Council on Radiation Protection and Measurements' board of directors.
Read more

In honor of Women's History Month, LLNL celebrates the accomplishments, dedication and contributions of women at the Lab and highlights Kathleen Noonan, nurse practitioner at LLNL, via *Newsline* and social media.
Read more

LLNL Chief of Staff Sheryl Hingorani begins an assignment as senior adviser to the deputy administrator of NNSA's Defense Programs (NA-10).
Read more

In honor of Women's History Month, LLNL celebrates the accomplishments, dedication and contributions of women at the Lab and highlights Pat Falcone, engineer and deputy director of Science and Technology at the Lab, via *Newsline* and social media.
Read more

The Lawrence Livermore Laboratory Women's Association features a special virtual event celebrating Women's History Month with Carolyn Hall and Kathleen Noonan, who were at the forefront of responding to the pandemic at LLNL.
Read more

Huban Gowadia, principal associate director for Global Security, is inducted into the state of Alabama's Engineering Hall of Fame.
Read more

In honor of Women's History Month, LLNL celebrates the accomplishments, dedication and contributions of women at LLNL and highlights Anup Singh, champion for the Lawrence Livermore Laboratory Women's Association, via *Newsline* and social media.
Read more

OPERATIONS

LLNL opens its new Emergency Operations Center (EOC) in Bldg. 031. The EOC is now housed in a building that is specifically designed and constructed for survivability and habitability under extreme conditions and can sustain operations without LLNL utilities and infrastructure.
Read more

The Laboratory's Annual Report for fiscal year 2021 is released and available online. This document is prepared each year to provide stakeholders, sponsors and employees with a summary of LLNL's national security mission milestones, programmatic and operational accomplishments and contributions to the community.
Read more

The latest edition of *SpotLight*, a look at the people who make up the Laboratory, is released. This issue's cover story touches on the adrenaline rush that Dionne and Patrick Williams have experienced since the couple took up the sport of drag racing.
Read more

Lawrence Livermore signs a memorandum of understanding with the City of Livermore to collaborate on advancing climate action in Livermore and build community-wide resilience to climate change impacts.

"LLNL's inclusive approach makes us a go-to resource for carbon neutrality. We're happy to collaborate with our neighbors in the city of Livermore on a cleaner atmosphere and friendlier climate."

– Roger Aines,
LLNL's Energy Program chief scientist

LLESA launches a new lactation program for parents that offers access to a special equipment-lending library.
Read more

To enable hybrid meetings, Livermore Information Technology enables many conference rooms throughout the site with video teleconferencing equipment.
Read more

APRIL

SCIENCE AND TECHNOLOGY

The national economy is reenergizing, quite literally. In 2021, Americans used 5% more energy than in 2020, according to the most recent energy flow charts from LLNL. Each year, LLNL releases flow charts that illustrate the nation's consumption and use of energy.
Read more

Researchers from Lawrence Livermore, Los Alamos and Sandia national laboratories team up to better understand the strength of tantalum, an important platform-development material in the tri-lab community.
Read more

Every fall, chemists and other researchers from the Lab's Forensic Science Center spend two weeks of long days undertaking the Organisation for the Prohibition of Chemical Weapons (OPCW) environmental proficiency test. LLNL researchers learn that they will receive an "A" grade for the 12th consecutive year in October's 50th OPCW proficiency test.
Read more

If humans are decreasing their greenhouse gas emissions to the atmosphere, how quickly can we detect a slowdown in global warming? In a study, LLNL climate scientist Mark Zelinka and collaborators develop a novel approach to more quickly see the temperature response to strong emissions reductions.
Read more

Using a new laser-based Volumetric Additive Manufacturing approach — an emerging technology in near-instant 3D printing — researchers at LLNL and the University of California, Berkeley demonstrate the ability to 3D-print microscopic objects in silica glass, part of an effort to produce delicate, layer-less optics that can be built in seconds or minutes.
Read more

NASA awards the Lab and a private company with funding to develop LLNL's revolutionary volumetric additive manufacturing VAM 3D printing technology to produce artificial cartilage tissue in space.
Read more

The Lab signs a memorandum of understanding with the city of Livermore to collaborate on advancing climate action in Livermore and seeking to build community-wide resilience to climate change impacts.
Read more

LLNL researchers refine the measurement of the gamma (γ)-to-neutron branching ratio in deuterium-tritium (D-T) fusion reactions. This reaction is a viable candidate for fusion energy, as it is known to have the largest cross section at center-of-mass energies below 500 keV.
Read more

Graduate students from National Defense University visit Lawrence Livermore.

"Given the importance of the energy sector to our national security and its potential use, the students were interested in learning how LLNL contributes to the advancements in the energy sector. We are grateful that the Lab hosts took the time to brief the students on how LLNL is making an impact on the world."

– Ana Navarro,
DOE and National Nuclear Security faculty chair

LLNL researchers develop a new all-optical ultrasound technique capable of performing on-demand characterization of melt tracks and detecting formation of defects in a popular metal 3D printing process.
Read more

PEOPLE

Three LLNL postdoctoral appointees attend the 71st annual Lindau Nobel Laureate meeting in Germany this summer thanks to the University of California President's 2022 Lindau Nobel Laureate Meetings Fellows Program. The three attendees are Magi Mettry, Johanna Schwartz and Dane Sterbentz.
Read more

Cindy Atkins-Duffin, principal deputy associate director for Global Security, is named the acting chief of staff to the director.
Read more

LLNL hosts seven individuals from the Air Force Global Strike Command.
Read more

Under Secretary of Defense for Research and Engineering Heidi Shyu visits LLNL.
Read more

Nearly 20 graduate students from National Defense University visit LLNL as part of the university's Energy Industry Studies program. The goal of the visit is for the students to learn about LLNL's expansive work in national security and energy.
Read more

OPERATIONS

Human Resources implements a revised, easy-to-use Employee Referral Bonus Program. Refer qualified candidates to approved bonus openings and you can earn a bonus.
Read more

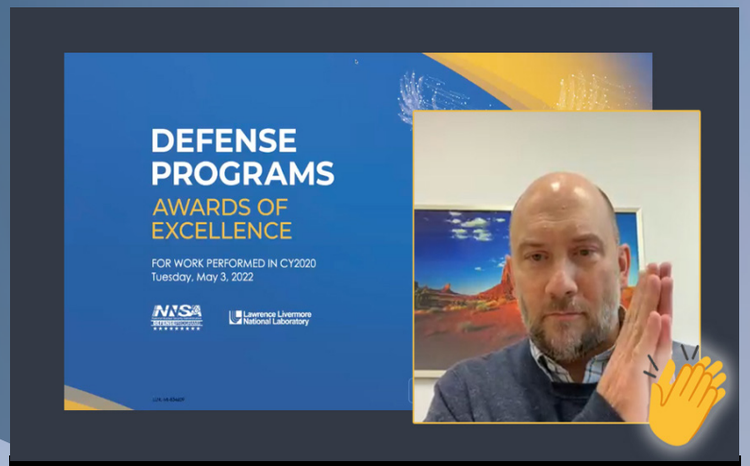
As LLNL settles into its new normal, the West Gate Badge Office adjusts to "new normal" operations. Popular services such as appointments and curbside pickups successfully implemented during the last two years continue.
Read more

MAY

SCIENCE AND TECHNOLOGY

The NNSA announces the award of an $18 million contract to Cornelis Networks for collaborative research and development in next-generation networking for supercomputing systems at the NNSA laboratories. The project is led by LLNL for the NNSA Tri-Labs.
Read more

LLNL scientists and collaborators develop a new technique to better forecast Lake Erie's level of harmful algal blooms, which are harmful to wildlife and humans. Using LLNL's NanoSIMS instrument, the team confirms that a small but highly active component of the microbiome was responsible for the degradation of the toxin.
Read more



Brad Wallin, principal associate director Weapons and Complex Integration at LLNL, congratulates the award recipients during the virtual event.

"The awards are a clear indication of the recipients' commitment to proactively support and successfully deliver on our nation's challenging stockpile requirements. I applaud the recipients and I'm grateful for their commitment to the mission of the nuclear security enterprise."

– Brad Wallin, principal associate director Weapons and Complex Integration

New research by an international team from 17 countries including LLNL scientist Keehoon Kim demonstrates that, based on atmospheric pressure waves recorded by global barometers, the January 2022 Hunga volcanic explosion was comparable in size to that of the 1883 Krakatoa eruption, and the largest recorded since the 1991 eruption of Mount Pinatubo.
Read more

LLNL scientists and collaborators at Penn State University improve natural molecules that would help target specific radioactive elements that are found in nuclear waste or used in nuclear medicine.
Read more

An international team of scientists from LLNL and beamline P02.2 at the PETRA III synchrotron radiation source develops an experimental platform that can perform simultaneous X-ray imaging and diffraction of samples that are compressed in the dynamic diamond anvil cell.
Read more

PEOPLE

The Lab celebrates Asian American, Native Hawaiian, and Pacific Islander Heritage Month (AANHPIHM) during the month of May. The Federal Asian Pacific American Council (FAPAC) designates the theme for 2022 as "Advancing Leaders Through Collaboration." In honor of AANHPIHM, the Asian Pacific American Council (APAC), in partnership with the Diversity, Equity and Inclusion Office, offers activities for employees through the month. APAC celebrates the "Year of the Tiger" with T-shirt sales. Employees are encouraged to use the Asian American, Native Hawaiian, and Pacific Islander Heritage Month-themed backgrounds for all virtual meetings throughout the month of May.
Read more

Bianca Toledo, UX designer in the Computing directorate at LLNL, is featured in *Newsline* in honor of Asian American, Native Hawaiian, and Pacific Islander Heritage Month.
Read more

Erika Taketa, infrastructure data integration manager within the Director's Office/Office of Laboratory Infrastructure, is featured in *Newsline* in honor of Asian American, Native Hawaiian, and Pacific Islander Heritage Month.
Read more

Jon Kawamoto, communications specialist matrixed to Doc Services in the National Ignition Facility & Photon Science (NIF&PS) directorate, is featured in *Newsline* in honor of Asian American, Native Hawaiian, and Pacific Islander Heritage Month.
Read more

Sara Cheng, a physicist in the Weapons Complex Integration Directorate in the Design Physics group, is featured in *Newsline* in honor of Asian American, Native Hawaiian, and Pacific Islander Heritage Month.
Read more

Shaun Stephenson, program manager for Strategic Military/Veterans Outreach and Recruiting in the Office of Government and External Affairs and Training Functional Area Manager in the Human Resource Directorate, is featured in *Newsline* as part of a Veteran's Showcase, He converses with Deputy Director Linda Bauer and Associate Chief of Staff Charles Ball about his career in the military.
Read more

Nine teams of LLNL researchers and one individual are honored during a virtual presentation of the NNSA Defense Programs Awards of Excellence.
Read more

Three testbed machines for Lawrence Livermore's future exascale El Capitan supercomputer — nicknamed rzVernal, Tioga and Tenaya — all rank among the top 200 on the latest Top500 List of the world's most powerful computers, released at the International Supercomputing Conference on May 30. Credit: Katrina Trujillo/LLNL.

"We're proud to add three more machines to the Top500 List of the world's most powerful supercomputers, where we were already well represented. The list continues to reflect the Lab's sustained excellence in leading-edge HPC worldwide, and we look forward to continued success in the era of exascale supercomputing."

– Chief Technology Officer for Livermore Computing Bronis R. de Supinski.

NNSA Associate Principal Deputy Administrator James McConnell visits LLNL, meeting with Lab Director Kim Budil, Deputy Director Linda Bauer, Deputy Director of Science and Technology Pat Falcone and other Lab leaders.
Read more

Gregory Potel Aguilar of the Lab's Nuclear Data and Theory group in the Nuclear Chemical Sciences Division publishes a book about a unified theory of nuclear structure and nuclear reactions using the language of quantum electrodynamics and Feynman diagrams.
Read more

OPERATIONS

For the second consecutive year, the American Indian Science and Engineering Society's *Winds of Change* magazine names LLNL as one of the Top 50 STEM Workplaces in 2022. According to *Winds of Change*, the Top 50 workplaces did not let temporary job market swings like the Great Resignation negatively interfere with their efforts to sustain an equitable and inclusive workplace. Read more

The Polymer Production Enclave, a new concept of concurrent engineering and accelerated development, becomes fully operational at LLNL, designed to deliver key components for the U.S. nuclear warhead modernization programs. The enclave will house both Livermore and Kansas City National Security Campus personnel working in tandem.
Read more

Bldg. 175 and the reactor inside Bldg. 280 are demolished to reduce risk and provide buildable area for new, improved structures.
Read more

LLNL and Amazon Web Services sign a memorandum of understanding with the goal of establishing a common stack of open-source software components that can run equally well at both large HPC centers and on cloud resources.
Read more

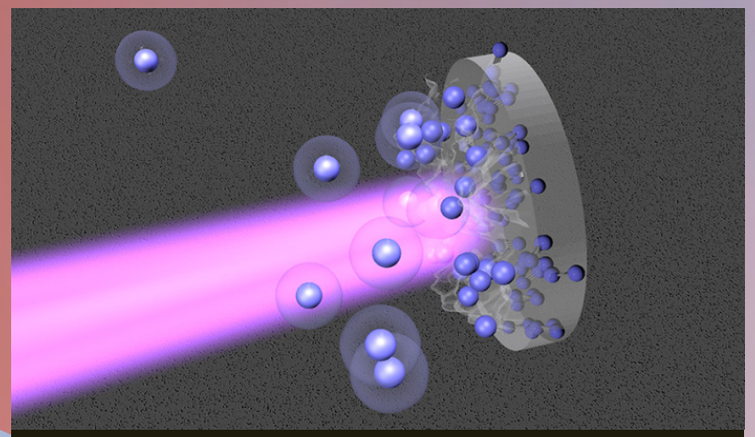
JUNE

SCIENCE AND TECHNOLOGY

Three LLNL machines rank highly on the latest Top500 List of the world's most powerful supercomputers. The early access systems for the upcoming exascale El Capitan — rzVernal, Tioga and Tenaya — all rank in the top 200 worldwide. With the addition of the new machines, LLNL now boasts nine systems on the biannual list, more than any other high performance computing center in the U.S.
Read more

The private-public Accelerating Therapeutic Opportunities in Medicine (ATOM) consortium shows "significant" progress in demonstrating that high performance computing and machine learning tools can speed up the drug discovery process, according to ATOM co-lead Jim Brase at a webinar.
Read more

Researchers from LLNL devise "E-Stablecoin," a new blockchain concept that could allow electricity to be transmitted between users who are spread around the world, without the need for interconnecting wires or a grid-based transmission system.
Read more



Laser-driven shock waves reaching several million atmospheres break the extremely strong triple bond of nitrogen molecules and free up a fraction of the L-shell electrons of the dissociated atoms. Image by Liam Krauss/LLNL.

"It is very exciting that we can use shock waves to break these molecules and understand how pressure and density induce changes in chemical bonding."

– LLNL physicist Yong-Jae Kim

Recent advances in pre-programmed architected materials could enable new functions that can evolve in response to their environments or external stimuli, according to LLNL researchers.
Read more

LLNL scientists obtain high-precision thermodynamic data on warm dense nitrogen at extreme conditions that could lead to a better understanding of the interiors of celestial objects like white dwarfs and exoplanets. The team, which includes researchers from the University of California, Berkeley and the University of Rochester, use an advanced technique that combines pre-compression in a diamond anvil cell and laser-driven shock compression at the Omega Laser Facility at the University of Rochester.
Read more

LLNL partners with Ampcera Inc. to develop solvent-free Laser Powder Bed Fusion additive manufacturing technologies for the fabrication of 3D-structured lithium battery cathodes.
Read more

Using naturally occurring and engineered proteins and bacteria, LLNL scientists and collaborators separate and purify rare-earth elements so they can be used in the defense sector.
Read more

Students from the University of California, Merced work with mentors at LLNL to identify drug compounds that could be used to treat COVID-19 during a two-week Data Science Challenge. The teams work together and with Lab computer scientists both on-campus and online on real-world drug discovery problems, using machine learning and other advanced tools to find small molecule inhibitors of SARS-COV-2, the virus that causes COVID-19.
Read more

PEOPLE

The African American Body of Laboratory Employees (ABLE) employee resource group and employees celebrate the nationally recognized holiday, Juneteenth, at the bosque on Thursday, June 16.
Read more

The LLNL Pride employee resource group (ERG) celebrates June as Pride Month with a kickoff meeting; an in-person Pride ERG leadership meet and greet; keynote speaker Lisa Kenney: "Parenting in the New World of Gender;" a Pride virtual luncheon and Kahoot Pride trivia; keynote speaker Lauren Esposito, an assistant curator, Schlinger chair of Arachnology at the California Academy of Sciences and founder of 500QueerScientists;and the Pride Café Series, an informal event series where attendees discuss topics in a safe space moderated by co-hosts including multiple sessions with different target audiences, topics and guests.
Read more

Michael Kruse, LLNL physicist, is featured in *Newsline* in honor of Pride Month, by celebrating the contributions of our Lesbian, Gay, Bisexual, Transgender, Queer and other community member (LGBTQ+) employees to our legacy of reaching new discoveries through cutting-edge research.
Read more

Camille Mathieu, a knowledge management program manager in the Weapons Complex Integration (WCI) Principal Directorate, is profiled in *Newsline* in honor of Pride Month, by celebrating the contributions of our Lesbian, Gay, Bisexual, Transgender, Queer and other community member (LGBTQ+) employees to our legacy of reaching new discoveries through cutting-edge research.
Read more

Naomi Marks, a researcher in the Lab's Chemical and Isotopic Signatures Group, examines a uranium ore concentrate for macro-scale heterogeneities as well as nuclear forensics and provenance assessment purposes.

"We are all excited and honored to have the ITWG annual meeting return home after 25 years. It is great recognition of both the historical role that LLNL has played in nuclear forensics, but also of LLNL's ongoing vital role in nuclear forensics, both domestically and internationally."

– Mike Kristo, technical host for the ITWG meeting and the leader for Lab's Chemical and Isotopic Signatures Group

Avery Stapleton, an electronics technologist working in industrial controls within the Engineering and NIF and Photon Science directorates, is featured in *Newsline* in honor of Pride Month, by celebrating the contributions of our Lesbian, Gay, Bisexual, Transgender, Queer and other community member (LGBTQ+) employees to our legacy of reaching new discoveries through cutting-edge research.
Read more

Brian Chavez, a graphic design associate matrixed from the Technical Information Department to the NIF and Photon Science directorate, is profiled in *Newsline* in honor of Pride Month, by celebrating the contributions of our Lesbian, Gay, Bisexual, Transgender, Queer and other community member (LGBTQ+) employees to our legacy of reaching new discoveries through cutting-edge research.
Read more

The DOE Technology Transfer Working Group awards two LLNL Innovation and Partnerships Office employees with "Best in Class" awards: Annemarie Meike receives the Innovative Lab Technology Transfer award for her work with the Lab's 3D-printing feedstock inks and Mary Holden-Sanchez wins a "Best in Class" licensing award for her work with LLNL's Numerical Electromagnetic Code Antenna Modeling Software.
Read more

Three LLNL scientists receive the DOE's Office of Science Early Career Research Program award. Mimi Yung, John Despotopulos and Timofey Frolov are among 83 awardees receiving the recognition.
Read more

Two LLNL scientists receive the prestigious 2021 E.O. Lawrence Award that recognizes mid-career U.S. scientists and engineers for exceptional scientific, technical and engineering achievements related to the broad missions of the DOE and its programs. Jennifer Pett-Ridge is recognized for pioneering work in quantitative microbial ecology, while Sofia Quaglioni is cited for her work in nuclear physics.
Read more

OPERATIONS

The Lab marks the 30th anniversary of the High Performance Storage System collaboration, comprising five DOE HPC national laboratories: LLNL, Lawrence Berkeley, Los Alamos, Oak Ridge and Sandia, along with industry partner IBM.
Read more

The installation of a new plutonium target fabrication facility at LLNL aims to improve the understanding of the physical characteristics of plutonium as it ages. It is a vital aspect of maintaining the reliability of the U.S. nuclear deterrent in the absence of underground testing.
Read more

Representatives from the City of Livermore, the NNSA, LLNL and community leaders officially dedicate Livermorium Plaza. The plaza, located at 116 S. Livermore Ave., pays perpetual tribute to the Lab's work on element 116, livermorium.
Read more

After a little more than 25 years, the Nuclear Forensics International Technical Working Group (ITWG) returns to its roots in Livermore. Founded in 1995 during an organizational meeting held at LLNL, the ITWG met in Europe for 24 straight years thereafter. About 70 nuclear forensics practitioners from 20 nations attend the week-long conference, consisting of a reception followed by three days of meetings and a tour of LLNL facilities.
Read more

Lab researchers Mark Burton (front right) and Jonathan Crowhurst align the laser ablation chamber for *in-situ* analysis of uranium oxide particulates.

"One of our most important findings was learning that the rate of cooling affects the behavior of uranium."

– Mark Burton,
chemist in the Lab's Materials Science Division

Department of Energy Under Secretary for Nuclear Security and NNSA Administrator Jill Hruby dedicates two critical infrastructure projects at LLNL. The Exascale Computing Facility Modernization project and LLNL's new Emergency Operations Center, both of which provide essential upgrades to Lab capabilities.
Read more

JULY

SCIENCE AND TECHNOLOGY

Researchers report the LUX-ZEPLIN experiment, led by Lawrence Berkeley National Lab, passes a check-out phase of startup operations and delivered its first results.
Read more

Scientists show that glaciers in the tropical Andes mountains are in sync with polar ice extent in Antarctica and the Arctic for nearly a million years.
Read more

Lab researchers collaborate with the French Alternative Energies and Atomic Energy Commission, known as CEA, to help develop a cryogenic target system for the CEA's Laser Mégajoule.
Read more

A Lab team will be among the first researchers to perform work on the world's first exascale supercomputer — Oak Ridge National Laboratory's Frontier — when they use the system to model cancer-causing protein mutations.
Read more

A team of researchers from Lawrence Livermore and the University of Michigan find that the rate of cooling in reactions dramatically affects the type of uranium molecules that form.
Read more

New research from Lawrence Livermore and an international team of collaborators produces the first spatially-resolved global estimates of mineral-associated carbon and the carbon-storage capacity of soil minerals.
Read more

A multi-institutional team of researchers and collaborators successfully executes an integrated vessel confinement system experiment at Lawrence Livermore, as part of an experimental campaign to study how nuclear materials react to high explosives without conducting a traditional nuclear test.
Read more

PEOPLE

Aden F. "Jerry" Mullins is profiled in *Newsline* in a Veterans Showcase as part The Lab's Veterans/Military Outreach and Recruiting Program.
Read more

Officials and faculty members from the University of California (UC), Merced visit Lawrence Livermore National Laboratory. The group includes Chancellor Juan Sánchez Muñoz, Vice Chancellor for Research and Economic Development Marjorie Zatz, Associate Chancellor and Chief of Staff to the Chancellor Luanna Putney and several UC Merced faculty members.
Read more

The Security Organization hosts its first graduation ceremony in nearly two years, honoring five new Security Police Officers for completing the Tactical Response Force–100 Academy.
Read more

A new compound of curium (a radioactive, rare and costly element) photographed at LLNL during crystallography experiments. The team from LLNL and OSU used the so-called "polyoxometalate ligands" (POMs) to capture rare isotopes and form crystals big enough to be characterized, even when only 1–10 micrograms of the rare isotope are available. Image by Gauthier Deblonde/LLNL.

"The simplicity, efficacy and modularity of the newly proposed method are astonishing, and it significantly decreases the radiation exposure to workers, preserves the nation's isotope resources and drastically cuts costs."

– LLNL scientist and project lead Gauthier Deblonde

The American Society of Safety Professionals, San Francisco Chapter, awards Tom Kohut, an operations manager at Lawrence Livermore's National Ignition Facility (NIF), with the "Managers Who Get Safety" award.
Read more

The Fusion Power Associates Board of Directors selects LLNL physicist Debbie Callahan as a recipient of its 2022 Leadership Award.
Read more

OPERATIONS

The National Ignition Facility (NIF) welcomes its 10,000th visitor.
Read more

The Independent Audit & Ethics Department (IAED) and Management Assurance Organization (MAO) officially combine to form the Office of Laboratory Oversight.
Read more

LLNL commemorates 50 years of the Lab's experimental laser programs.
Read more

AUGUST

SCIENCE AND TECHNOLOGY

Scientists at Lawrence Livermore's Energetic Materials Center and Purdue's University Materials Engineering Department use simulations performed on the LLNL supercomputer Quartz to uncover a general mechanism that accelerates chemistry in detonating explosives critical to managing the nation's nuclear stockpile.
Read more

A Lab team develops GridDS — an open-source, data-science toolkit for power and data engineers that will provide an integrated energy data storage and augmentation infrastructure, as well as a flexible and comprehensive set of state-of-the-art machine-learning models.
Read more

Researchers at Lawrence Livermore, Oak Ridge National Laboratory and several universities use a common laser-based metal 3D printing method to produce a new class of high entropy alloys that demonstrate both high yield strength and high ductility beyond other state-of-the-art 3D printed metal alloys.
Read more

Laboratory scientists emulate the conditions of Lonsdaleite formation using picosecond time scale laser compression and observe the transition with state-of-the-art material characterization using femtosecond X-ray pulses.
Read more

On the one-year anniversary of the historic 1.3 megajoule yield achieved at the Lab's National Ignition Facility (NIF), the scientific results are published in three peer-reviewed papers.
Read more

Images and data from the James Webb Space Telescope are produced with a little help from Lawrence Livermore, thanks to detector software support and development of a grism.
Read more

LLNL scientists create a new adjoint waveform tomography model that more accurately simulates earthquake and explosion ground motions.
Read more

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New Lawrence Livermore Machinist Apprentice Program graduates, from left, Kwadwo Kumi-Amankwah, Jorge Dalmau, Sean Ziegler and Kyle Parsons are honored for their achievements during a ceremony in Livermore on Aug. 18. All four graduates of the four-year apprenticeship will continue working at LLNL as full-time machinists

"Engineering's heart and soul is in manufacturing — it has been since Day One and it will always be important. To the families of these graduates, thank you for supporting them in this endeavor. It wasn't easy; no doubt about it."

– Engineering Directorate Senior Superintendent Randy Pico

A joint Lawrence Livermore and Sandia National Laboratories team successfully performs the W80-4 Abnormal Thermal Environment (ATE)-1 test in the LLNL Contained Firing Facility at Site 300.
Read more

Lawrence Livermore researchers design a compact multi-petawatt laser that uses plasma transmission gratings to overcome the power limitations of conventional solid-state optical gratings.
Read more

PEOPLE

High school students from Diablo Valley College's (DVC) machinist summer camp visit LLNL to learn about advanced manufacturing practices and tour two of the Lab's premier manufacturing facilities.
Read more

A Lawrence Livermore team claims a top prize at an inaugural international symbolic regression competition for an artificial intelligence framework they developed capable of explaining and interpreting real-life COVID-19 data.
Read more

The IEEE Nuclear and Plasma Sciences Society announces a Lawrence Livermore team as the winner of its *2022 Transactions on Plasma Science* Best Paper Award for their work applying machine learning to inertial confinement fusion experiments.
Read more

Breanna Bishop is named as Lawrence Livermore's senior director of strategic communications.
Read more

Linda Bauer, deputy director of Lawrence Livermore, leaves the Laboratory.
Read more

Carolyn Zerkle is selected as the Laboratory's deputy director and vice president of Lawrence Livermore National Security, LLC.
Read more

Lawrence Livermore retiree and current visiting scientists and professionals participant Dennis Baum is named a Ballistics Science Fellow at the 32nd International Symposium on Ballistics held by the International Ballistics Society in Reno, Nevada.
Read more

Four Machinist Apprenticeship Program graduates accept their state-certified journeyman certificates at a ceremony, marking their graduation from the program and transition to full-time jobs at LLNL.
Read more

The Weapons and Complex Integration Directorate holds its annual Gold Awards ceremony virtually. During the ceremony, seven teams and two individuals are recognized for their exceptional achievements in FY22. In addition, a Defense Programs Award of Excellence is presented that was not included in the celebration of CY2020 awards in May.
Read more

OPERATIONS

Leaders at Lawrence Livermore and the Korea Institute of Science and Technology sign a memorandum of understanding to collaborate on basic science and technology in the renewable energy, climate science, data science and characterizations arenas.
Read more

Lawrence Livermore signs a memorandum of understanding with high performance computing facilities in Germany, the United Kingdom and the United States, jointly forming the International Association of Supercomputing Centers.
Read more

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Lawrence Livermore National Laboratory engineer Jack Cutting (far left) and other LLNL employees surround a nuclear device as it is moved through the "N Tunnel" at the Nevada Test Site. Photo from LLNL Archives.

"The diagnostics performed as required and we were happy with the results. Everything worked quite well. We got a lot of good data on it."

– LLNL physicist Todd Hoover

Officials with Las Positas College and the Chabot-Las Positas Community College District visit Lawrence Livermore to learn more about Lab-related opportunities available to students and discuss strengthening partnerships between the institutions.
Read more

The Laboratory ceases its mandatory COVID-19 assurance testing program and lifts its indoor mask requirement for Sites 200 and 300.
Read more

SEPTEMBER

SCIENCE AND TECHNOLOGY

LLNL surveys some of the significant scientific discoveries that have helped ensure the reliability of the nation's nuclear stockpile through the Stockpile Stewardship program.
Read more

To annually assess the stockpile, the labs need to develop new tools and technologies for determining the condition of weapons and for advancing scientific discovery to resolve any unknowns discovered in surveillance — for example, regarding issues that might impact the performance of nuclear devices. Their challenge is to develop the needed new tools and increase understanding at a pace faster than concerns about aging weapons arise. They also will have to ensure that a trained workforce of people with knowledge and experience in a wide variety of fields is be available in perpetuity to perform the work.
Read more

LLNL scientists and their collaborators at Oregon State University develop a new method to isolate and study in great detail some of the rarest and most toxic elements on Earth.
Read more

Laboratory researchers use the National Ignition Facility to explore the opacity of hydrogen under the extreme pressures and relatively low temperatures found in the interior of red dwarfs.
Read more

Laboratory researchers and their collaborators develop new high-energy pulse compression gratings that will be used in the world's highest-power laser system, designed to deliver up to 10 petawatts (quadrillion watts) of peak power. A petawatt is about 1,000 times the capacity of the entire U.S. electric grid.
Read more

The University of Utah announces the creation of a new oneAPI Center of Excellence focused on developing portable, scalable and performant data compression techniques. The oneAPI Center will be headed out of the University of Utah's Center for Extreme Data Management Analysis and Visualization and will involve the cooperation of LLNL's Center for Applied Scientific Computing.
Read more

LLNL researchers examine a sample of Ryugu, an ancient fragment of a larger asteroid that formed very early in solar system history.
Read more

An international research team including LLNL scientists succeeds in gaining new insights into the chemical properties of the superheavy element flerovium — element 114.
Read more

The team of muralists pose in front of the “Dream Big” mural they created to honor NASA astronauts with ties to Lawrence Livermore and Sandia national laboratories, the Livermore arts community and the Tri-Valley area. From left: Thomasin Dewhurst; Larry Lagin, a former deputy project manager with LLNL’s National Ignition Facility; Anne Giancola; and Matt Finders. Credit: Jason Laurea/LLNL.

“It’s really not just about the astronauts. It’s about dreaming big, working hard, and if you do, you can achieve whatever you want. It’s really a great message, especially to send to kids. It’s something I feel very passionate about. And it kind of reminded me of my own experiences. I had a 40-year career as a scientist and as a manager.”

– Larry Lagin,
former deputy project manager for the National Ignition Facility

Thirty years later, Hunters Trophy participants recall LLNL’s final underground nuclear test.
Read more

LLNL researchers and collaborators take a deep dive in understanding how solid matter behaves at enormous pressures, such as those found in the deep interiors of giant planets.
Read more

PEOPLE

The Laboratory’s Johnny Foster: nuclear weapon designer and team leader, former Laboratory director, former director of Defense Research and Engineering at the Department of Defense and record-setting ski jumper, turns 100 years old in September. As he does so, LLNL celebrates a century of his extraordinary life and accomplishments.
Read more

Lab retiree Larry Lagin encourages new generations of students to “Dream Big” — the title of a mural in downtown Livermore that celebrates NASA astronauts with ties to the city, the Tri-Valley area and Lawrence Livermore and Sandia national laboratories.
Read more

LLNL Amigos Unidos Hispanics in Partnership employee resource group, in partnership with Diversity, Equity and Inclusion at LLNL, share Hispanic culture and heritage with the rest of the Laboratory population through various activities in honor of Hispanic Heritage Month (HHM) Events include a webinar with Belen Sanchez Hidalgo, “Artificial Intelligence: The Role of Latin American Women in the Tech Industry.” Employees are encouraged to use the HHM-themed backgrounds for virtual meetings.
Read more

Director Kim Budil recognizes 2022 Director’s Awards recipients at a ceremony, praising honorees for their scientific, operational and cultural accomplishments over the past year. The annual awards recognize outstanding team and individual contributions to the Lab in areas of operational excellence, science and technology, publications and diversity, equity and inclusion efforts, as well as exceptional early and mid-career employees.
Read more

LLNL employees along with the Shalom Jewish Community employee resource group celebrate the Jewish New Year and explore the tastes and sounds of this popular holiday — ringing in the Year 5783 on the Hebrew calendar. The group provides food and music in celebration of Rosh Hashanah.
Read more

LLNL celebrates the people of stockpile stewardship and the variety of the work that they perform to support the mission, as well as how that work has evolved. All LLNL employees support the stewardship mission in one way or another — in scientific and engineering roles, and in many more occupations.
Read more

Gaby Dávila Ordoñez, an experimental scientist in the Physical and Life Sciences directorate’s Atmospheric, Earth and Energy Division, is profiled in *Newsline* in honor of Hispanic Heritage Month.
Read more

Brytni Soto, a recruiting intern for an LLNL contract company, is profiled in *Newsline* in honor of Hispanic Heritage Month.
Read more

Belén Sánchez Hidalgo, a senior data scientist at DataRobot, presents “Artificial Intelligence: The Role of Latin American Women in the Tech Industry” as part

All nine living Lawrence Livermore directors including John Foster Jr. (right) and John Nuckolls (left) gather for a historic panel discussion on Sept. 8 to celebrate the Laboratory's upcoming 70th anniversary, share stories and discuss their vision for the Laboratory in the coming years.

"This Lab is a special place. We think that these labs will always be here, but yet they've (only) been here about the same time as some of us. We have to take care of them — that's a responsibility that we all share."

– National Nuclear Security Administration Jill Hruby

of the Evolving Perspectives lecture series hosted in partnership with the Data Science Institute, Computing DEI and Amigos Unidos. The event is in honor of Hispanic Heritage Month.
Read more

LLNL scientists and engineers garner three R&D 100 awards bringing the total of 176 R&D 100 awards since 1978.
Read more

Alison Ruth Christopherson earns the American Physical Society's Marshall N. Rosenbluth Outstanding Doctoral Thesis award "for theories of fusion alpha heating and metrics to assess proximity to thermonuclear ignition in inertially confined plasmas, and for the development of a novel measurement of hot electron preheat and its spatial distribution in direct-drive laser fusion."
Read more

The Burning Plasma Team receives the 2022 John Dawson Award for Excellence in Plasma Physics Research by the American Physical Society. The team consists of members from LLNL and from other institutions. The team is cited "for the first laboratory demonstration of a burning deuterium-tritium plasma where alpha heating dominates the plasma energetics."
Read more

Miriam "Mim" E. John, vice president emerita of Sandia National Laboratories, receives Livermore's 2022 John S. Foster Medal. The Foster Medal is awarded annually in recognition of exceptional leadership in scientific, technical and engineering development and policy formulation in support of U.S. nuclear security.
Read more

Steven Bohlen is named as the senior director for the Lab's Office of Government and External Affairs.
Read more

Lab directors discuss LLNL's past, present and future at a historic conversation to mark the Laboratory's 70th anniversary. They share stories and discuss their vision for the Lab in the coming years.
Read more

Steve Kreek is selected as the Human Resources deputy associate director.
Read more

Ashley Bahney, currently the Weapons and Complex Integration chief of staff, is selected as acting chief of staff to the director. She will assume the role on Oct. 17, when the current Acting Chief of Staff Cindy Atkins-Duffin retires.
Read more

Andrew Carver, LLNL's current W80-4 LEP Polymers Product Realization Team lead, begins a one-year assignment at the Office of the Assistant Secretary of Defense for Acquisition (OASD(A))/Strategic, Space, and Intelligence Portfolio Management, Office of Strategic Deterrence and Capability in Washington, D.C.
Read more

Mark Walker, an international security analyst in Z Program, completes an offsite assignment as a nuclear deterrence policy adviser in the Office of the Under Secretary of Defense for Policy.
Read more

Lab Director Kim Budil recognizes 2022 Director's Awards recipients at a ceremony praising honorees for their scientific, operational and cultural accomplishments over the past year.
Read more

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HBCU students, from left, Ashleigh Wilson, Alisha Saylor, Lamia Ruffin and Sean Nesbit got a close-up look at a National Ignition Facility target capsule during a tour in June. The tour was one of the many events LLNL organized for the HBCU students. Credit: Jason Laurea/LLNL

"These students are grooming to potentially be our next wave of summer interns. We hope that having them here to see first-hand the (Laboratory) experience would motivate them to continue to work hard to hone their skill sets and also dispel any anxieties of traveling across the country for an internship."

– Zhi Liao, NIF&PS workforce manager consortium.

OPERATIONS

For the first time in the history of Lawrence Livermore, more than $1 billion in procurements is spent this fiscal year (FY). On Sept. 21, procurement expenditures total $1.088 billion, over double the amount spent just six years ago in FY16 and a 20% increase over FY21.
Read more

LLNL hosts a panel to discuss the 30th anniversary of the end of nuclear testing. The panelists emphasize how the end of testing impacted the Lab both technologically and culturally.
Read more

LLNL hosts a group of students and faculty from Historically Black Colleges and Universities for a week to promote internships, job opportunities and career paths at LLNL.
Read more

Members of the infrastructure community celebrate a major milestone in the construction of the Bldg. 144 Stockpile LEP Office Facility. Bldg. 144, which began construction in April 2022, will support the Weapons Program by adding up to 100 new Q offices in a 22,000 square foot building.
Read more

The Weapons and Complex Integration directorate hosts its External Review Committee (ERC). This year's ERC features talks on current efforts and future plans aimed at implementing the WCI strategic framework.
Read more

The Lab hosts a visit by the Oppenheimer Science and Energy Leadership Program cohort. The cohort sees how the Lab is committed to applying science and technology to make the world a safer place.
Read more

Twelve employees are named to LLNL's eighth annual Early and Mid-Career Recognition Program.
Read more

Yaakov Idell, materials staff scientist at LLNL, begins a two-year assignment as a technical adviser to deputy chief of staff of the United States Air Force in the office of Strategic Deterrence and Nuclear Integration located at the Pentagon.
Read more

OCTOBER

SCIENCE AND TECHNOLOGY

The Earth System Grid Federation, an international multi-institutional initiative that gathers and distributes data for top-tier computer simulations of the Earth's climate, prepares a series of upgrades that will make using the data easier and faster while improving how the information is curated.
Read more

A high performance computing project led by LLNL researchers is one of 22 awarded funding by the Department of Energy under the 2022 "Exploratory Research for Extreme-Scale Science" program.
Read more

Producing fragrances and flavorings and converting chemicals derived from biomass could get a boost from a new technique to break up hydrogen in nanoporous copper-titanium catalysts.
Read more

NASA astronaut Jack Fischer swabs surfaces in the International Space Station to collect microbe samples. A five-year microbial study by LLNL and NASA researchers has provided the first comprehensive characterization of the space station's environmental profile (or microbiome). Photo credit: NASA.

"We have found that the microbiome of the ISS surfaces is stable and that most of the microbiome is associated with human skin."

– LLNL biologist Crystal Jaing

While the Lab is eagerly awaiting the arrival of its first exascale-class supercomputer, El Capitan, physicists and computer scientists running scientific applications on testbeds for the machine get a taste of what to expect.
Read more

Lab scientists devise a method for the fabrication of all-solid-state lithium metal batteries, which have been recognized as the future choice for safe and high-energy-density power sources.
Read more

Andrew Longman, an LLNL postdoctoral fellow, proposes that spiral-phase mirrors, when incorporated into a laser system, will enable scientists to "twist" the laser light and generate an optical vortex.
Read more

LLNL scientists scale up the production of vertically aligned single-walled carbon nanotubes that could revolutionize diverse commercial products ranging from rechargeable batteries, automotive parts and sporting goods to boat hulls and water filters.
Read more

A five-year microbial study of the International Space Station and its astronauts by LLNL and NASA researchers finds that the ISS habitat is safe for its residents.
Read more

Transforming the way energy is collected, stored and used has become a defining challenge of the 21st century. To address this task, the DOE's Office of Basic Energy Sciences establishes the Energy Frontier Research Center program. This year, the program awards LLNL and collaborators three projects.
Read more

Lab researchers start work on a three-year project aimed at improving methods for visual analysis of large heterogeneous data sets as part of a recent Department of Energy funding opportunity.
Read more

PEOPLE

Michael Cardenas, deputy assurance manager for DTED/Weapon Technologies and Engineering, is profiled in *Newsline* in honor of Hispanic Heritage Month.
Read more

Raul Baez Lara, a performance management specialist in Environment Safety and Health, is profiled in *Newsline* in honor of Hispanic Heritage Month.
Read more

Twenty-six LLNL researchers are named Distinguished Members of Technical Staff (DMTS) for their extraordinary scientific and technical contributions, as acknowledged by their professional peers and the broader scientific community. As distinguished citizens of the Laboratory and their scientific areas of specialization, DMTS honorees have a sustained history of exceptional achievements and service-minded leadership as role models and mentors in their field.
Read more
Read more
Read more

Kerianne Pruett, a spacecraft systems engineer matrixed to the Physics Division, is profiled in *Newsline* In honor of National Disabilities Employment Awareness Month.
Read more

From left, LLNL's Mike Owen, Katie Kumamoto and Megan Bruck Syal at the DART Impact Event at Johns Hopkins University Applied Physics Laboratory on Sept. 26, 2022.

"Dimorphos' surface filled the whole image, at which point the hundreds of people that I was with began cheering: we were going to hit it. But the eruption of screams of joy and celebration when we got that final partial frame, which we knew was the signal that the spacecraft had been destroyed, was incredible."

– LLNL scientist Katie Kumamoto

Two Lab-led teams receive SciVis Test of Time awards at the 2022 IEEE VIS conference, for papers that have achieved lasting relevancy in the field of scientific visualization.
Read more

Physicist Tom Ramos writes a book titled "From Berkeley to Berlin," which focuses on how the United States had the ability to stand up to Nikita Khrushchev, former leader of the Soviet Union, and his attempts to expand Soviet influence around the globe.
Read more

John Clauser, an experimental physicist who spent a decade at LLNL, is awarded the 2022 Nobel Prize in Physics, along with French scientist Alain Aspect and Austrian scientist Anton Zeilinger.
Read more

LLNL research scientist Richard Kraus is the recipient of the inaugural American Physical Society's 2023 Neil Ashcroft Early Career Award for Studies of Matter at Extreme High Pressure Conditions. Kraus is recognized for his outstanding theoretical or experimental contributions by an early-career scientist to studies of matter at extreme high-pressure conditions.
Read more

The Lab's DART team members recollect asteroid impact as NASA confirms the mission altered the asteroid's orbit. NASA's DART spacecraft successfully impacted its asteroid target in the world's first planetary defense technology demonstration at 4:14 p.m. (PDT) on Sept. 26. Two weeks after impact, NASA confirms the mission changed the asteroid's motion in space.
Read more

Bruce Remington, a distinguished member of the technical staff at the Lab, is honored with the American Physical Society's 2023 George E. Duvall Shock Compression Science Award, which recognizes contributions to understanding condensed matter and non-linear physics through shock compression.
Read more

Physicists Andrea (Annie) Kritcher and Ronnie Shepherd are selected as 2022 fellows of the American Physical Society.
Read more

The United Nations Intergovernmental Panel on Climate Change is jointly awarded the Gulbenkian Prize for Humanity, alongside the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. LLNL climate scientists have contributed as invited authors to every one of the six IPCC Assessment Reports since the first was released in 1990.
Read more

OPERATIONS

The Laboratory's University Relations and Science Education program is renamed the Academic Engagement Office to better reflect LLNL's engagement with the many levels of institutions and organizations within academia.
Read more

The three-building Hertz Hall complex on the east side of the Lab has a new look and a new name. Following an extensive nine-month renovation, the buildings now form the University of California Livermore Collaboration Center and will serve as a University of California multi-campus hub to expand collaborations and partnerships with three national labs.
Read more

LLNL empowers multidisciplinary teams to pursue bold and innovative science and technology, finding solutions to some of the greatest security challenges facing the nation and the world — and the Lab is growing every

YELLOW LINKS ARE ACCESSIBLE ON THE LAB'S INTERNAL NETWORK ONLY.
BLUE LINKS ARE ACCESSIBLE ON BOTH THE INTERNAL AND EXTERNAL LAB NETWORK.

More than 5,000 Lab employees gather to celebrate the Lab's 70th anniversary. Throughout the first-ever Employee Engagement Day, dozens of the Lab's facilities and programs open their doors for employees to get a close-up look at LLNL's cutting-edge science and technology. It is a celebration of making the impossible possible, bringing a huge number of Lab colleagues on-site together at the same time for the first time in years.

"I can sense a lot of enthusiasm. We're very proud to show what we do; we're part of a big family."

– Felicie Albert, deputy director for the Lab's High Energy Density Science Center

day. To recruit prospective employees for more than 500 open positions, LLNL hosts its first-ever on-site career fair.
Read more

LLNL installs a $3.5-million modernized receiving system in the form of a smarter, more efficient conveyer belt in the SDD's Shipping & Receiving (aka Bldg. 411) warehouse.
Read more

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The LLNL Ombuds group hosts its first annual Ombuds Forum: Exploring Clarity, Insight, and Resolution to Workplace Challenges. The forum provides ombuds the opportunity to discuss case studies, learn about conflict styles and to see each other in-person after a long hiatus due to the pandemic.
Read more

Livermore's team of postdocs is impressive at the second annual Bay Area Research SLAM!, winning second-place individual, audience choice and team awards.
Read more

Asmeret Asefaw Berhe, director of the Department of Energy's Office of Science (SC), gets a deep dive into a variety of SC-sponsored programs at LLNL during an onsite visit to the Lab.
Read more

Gwendelyn Pinkela, LLNL technical communications specialist, begins a short-term assignment with the Department of Energy's Office of Economic Impact and Diversity; Office of Diversity, Equity, Inclusion and Accessibility.
Read more

NOVEMBER

SCIENCE AND TECHNOLOGY

Lawrence Livermore scientists and collaborators show that grassland viral communities are highly spatially stratified across just a single field, suggesting strong dispersal limitations at the local scale.
Read more

LLNL receives $2.35 million from the Inflation Reduction Act, which aims to support domestic energy production and promote clean energy and to provide the Department of Energy national laboratories with resources to keep the U.S. at the forefront of scientific discovery. The funding is allocated for the Lab-led nEXO project, which was created to understand neutrinos.
Read more

The High-Performance Computing for Energy Innovation (HPC4EI) initiative opens its fall 2022 solicitation cycle to industry partners interested in collaborating with the Department of Energy to address key energy and decarbonization-related challenges.
Read more

A multi-national team, including current and former LLNL scientists, uses synchrotron X-rays to track discrete slip avalanche events in titanium held under load at room temperature.
Read more

LLNL researchers discover that ions behave differently in fusion reactions than previously expected, thus providing important insights for the future design of a laser-fusion energy source.
Read more

Lawrence Livermore and UC Santa Cruz scientists detect a previously hypothesized class of nitrogen

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LLNL researchers, from left to right, Nicholas Hum, Feliza Bourguet, and Dina Weilhammer perform molecular characterization research for the brain's response to a Rift Valley fever virus infection. Photo by Garry McLeod.

"Fundamentally, we were trying to understand how the immune response in the brain controls infections with Rift Valley fever virus. It's a mosquito-borne disease that can infect many types of livestock and people."

– LLNL biologist and team leader Dina Weilhammer

fixation in the surface ocean.
Read more

Lawrence Livermore scientists develop a new technique — high-throughput Stable Isotope Probing — that automates several steps in the process of stable isotope probing, allowing investigations of microbial activity of microorganisms under realistic conditions, without the need for lab culturing.
Read more

LLNL scientists find that the differences between climate satellite observations and model simulations is due to the natural fluctuations in Earth's climate and imperfections in climate-model forcing agents.
Read more

The 2022 International Conference for High Performance Computing, Networking, Storage, and Analysis (SC22) returns to Dallas as a large contingent of LLNL staff participate in sessions, panels, paper presentations and workshops centered around high performance computing.
Read more

Lawrence Livermore scientists build a unique process to synthesize radioactive compounds (uranium-based) that are extremely air- and water-sensitive and require specific techniques.
Read more

An LLNL team of materials and computer scientists uses datasets of polymer properties to develop a novel machine-learning (ML) model that can predict 10 distinct polymer properties more accurately than was possible with previous ML models.
Read more

Research by LLNL scientists suggests that immune responses could be bolstered by drugs to help people recover from brain infections caused by an emerging pathogen.
Read more

PEOPLE

The American Indian Activity Group (AIAG) employee resource group and the Lab community celebrates National Native American Heritage Month (NAHM). Activities include keynote speaker Jerry C. Elliott (Osage/Cherokee), the first native American to work at NASA in the mission control center in 1966, and a patio 'meet and mingle' with AIAG members.
Read more

At a Veterans Day event, the Lab honors all who served, including members of the Veterans in Energy Technology & Science.
Read more

The Society for Industrial and Applied Mathematics (SIAM) and Association for Computing Machinery (ACM) awards the 2023 SIAM/ACM Prize in Computational Science and Engineering to the team behind the Lawrence Livermore-developed SUNDIALS software suite.
Read more

Lab scientists Félicie Albert and Craig Siders are selected as fellows of Optica (formerly OSA).
Read more

The high performance computing publication *HPCwire* awards Lawrence LLNL as the winner of its Editor's Choice award for Best Use of HPC in Energy for applying cognitive simulation (CogSim) methods to inertial confinement fusion research.
Read more

Lawrence Livermore National Laboratory's first-ever on-site career fair was a resounding success, with more than 500 people coming to the Lab to learn about career opportunities.

"We had a fantastic turnout at our career fair, and we hope to make some great hires from this event."

– Talent Acquisition Group Leader Sheril Burke

Des Pilkington, currently the principal deputy principal associate director for Weapons and Complex Integration, is named acting director for Strategy and Planning effective immediately.
Read more

After a two-year delay due to the pandemic, the FY19 Leadership Institute participants celebrate the completion of their program at The Palm Event Center.
Read more

Experts from LLNL's Environmental Safety and Health Directorate make waves outside the Lab in 2022 with three U.S. patents, a lifetime achievement award from the DOE and a major position with the Nuclear Energy Agency. In many cases, these honors were the results of a team effort, including students, postdoctoral researchers and staff led by industry experts.
Read more

California Energy Commission Commissioner Andrew McAllister and members of his staff visit the Lab to tour the National Ignition Facility (NIF) and participate in a roundtable discussion with representatives from the Lab's Carbon Initiative and Energy programs on the commission's efforts to address the state's carbon reduction and energy sustainability goals.
Read more

CASC researchers host the second annual workshop for the MFEM user and developer community. The event is designed to promote collaboration, describe the project's latest features, expand application engagements and solicit feedback to guide future development.
Read more

The Lab hosts Rear Admiral Anthony Carullo, director of plans and policy for the United States Strategic Command, for briefings.
Read more

Heath Bigman is pursuing a career in the sciences, eventually leading him to Lawrence Livermore. He is featured in honoring Native American Heritage Month.
Read more

Caitlin Rowe has overcome overwhelming obstacles to excel as a college graduate, as a summer intern working on nuclear survivability experiments — and as a person. This summer, Rowe becomes a Gold Star intern at the LLNL's National Ignition Facility (NIF), the world's largest and most energetic laser.
Read more

The Veterans in Energy, Technology, and Science (VETS) group runs Operation Value a Veteran. This operation will provide a warm, delicious breakfast for the residents at the Livermore VA Community Living Center.
Read more

Lab officials welcome NNSA Principal Deputy Administrator Frank Rose for a visit where he receives updates on the Lab's commitment to national and global security.
Read more

The American Indian Activity Group employee resource group and the Lab community celebrate National Native American Heritage Month.
Read more

OPERATIONS

As Lawrence Livermore recruits top talent for more than 500 open positions across all directorates and disciplines, hundreds of LLNL hopefuls line up around the outside of the building and down the sidewalk to attend the Lab's first-ever onsite career fair.
Read more

The San Joaquin Expanding Your Horizons conference celebrates its 30th anniversary with the theme "STEM:

CERT members demonstrate a “Fire Attack” in a hands-on class using fire extinguishers.

“They were all in all committed. They did very well and they’re ready for more.”

– Brad Bieck, lead fire inspector at LLNL

It’s Like Magic, but Real,” bringing more than 250 girls (and some boys) to the University of the Pacific campus in Stockton to learn more about science, technology, engineering and mathematics (STEM).
Read more

Livermore Information Technology (LivIT) launches a new Emergency Information button, which appears on the user bar of the myLLNL web page.
Read more

Since 2014, the Lab has trained a group of emergency volunteers in skills such as light search and rescue, medical triage, first aid and traffic management to assist emergency crews who may be at capacity. The team includes about 60 members whose day jobs span the breadth of Lab directorates and duties. This year, volunteers help during the SCU Lightning Complex Fire.
Read more

The Lab launches a campaign to include favorite desserts in a holiday dessert cookbook.
Read more

For LLNL employees who own electric vehicles, open on-site charging is on the way. Forty-four of the Lab’s approximately 46 Level 2 electric vehicle (EV) charging stations, previously open only to government vehicles and a small group of employees in a pilot program, will now be available to anyone registering at the Lab to juice up their car.
Read more

Nearly 1,000 employees come together for the Home Run for HOME, an employee focused, festival-style event that serves to kickoff the HOME Campaign. This year’s Home Run for HOME is co-hosted by Global Security and the Livermore Laboratory Employee Services Association (LLESA) with the baseball-inspired theme, “One Team. One Dream.”
Read more

Health Services offers one visit, two vaccines: co-administration of COVID-19 and flu shots.
Read more

The Project Management Organization celebrates a major milestone in safety: one million safe hours of work on projects between Aug. 21, 2020 and October 2022.
Read more

After 10 years, the “try something new” spirit of Computing’s seasonal hackathon is alive and well. The fall 2022 event features an Amazon Web Services (AWS) DeepRacer machine learning (ML) competition in which participants used a cloud-based racing simulator to train an autonomous race car with reinforcement learning (RL) algorithms.
Read more

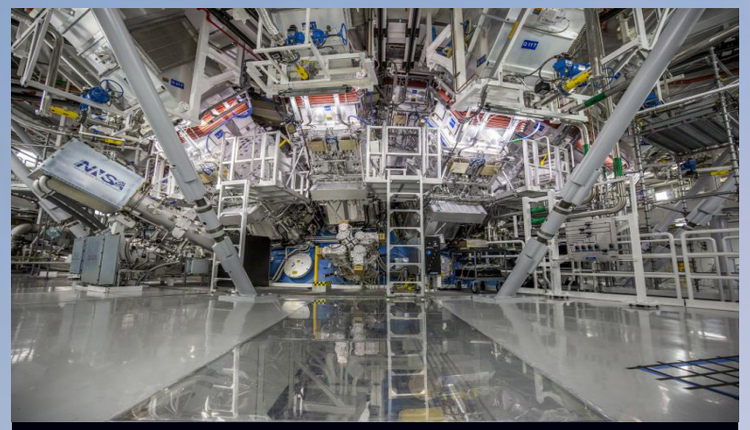
Livermore Information Technology (LivIT) places special focus on the IT Knowledge Base — the online resource where employees can search and find answers to their IT questions. This year’s campaign, inspired by the FIFA World Cup, offers participation in the KNOWvember Cup.
Read more

The Lab launches the 2022 Helping Others More Effectively (HOME) Campaign.
Read more

DECEMBER

SCIENCE AND TECHNOLOGY

The DOE and NNSA announce the achievement of fusion ignition at Lawrence Livermore — a major scientific breakthrough decades in the making that will pave the way for advancements in national defense and the future of clean power.
Read more



The target chamber of LLNL's National Ignition Facility (NIF), where 192 laser beams deliver more than 2 million joules of ultraviolet energy to a tiny fuel pellet to create fusion ignition on Dec. 5, 2022.

"This is a landmark achievement for the researchers and staff at the National Ignition Facility who have dedicated their careers to seeing fusion ignition become a reality, and this milestone will undoubtedly spark even more discovery."

– U.S. Secretary of Energy Jennifer M. Granholm

Call it the shot heard " 'round the world." The monumental, first-ever demonstration of fusion ignition by Lawrence Livermore's National Ignition Facility (NIF) marks a potentially world-changing breakthrough for fusion energy and a key initial step in a decades-long quest for limitless clean energy, U.S. government officials and LLNL scientists said.
Read more

A team of Lab scientists has developed a new technique to analyze fentanyl in human blood and urine samples that could aid work in medicine and chemical forensics.
Read more

Lab scientists report on a series of X-ray diffraction experiments on five metals dynamically compressed to 600 GPa. In addition to collecting atomic structure information for multiple compressed samples, the team demonstrates a different approach for pressure determination applicable to X-ray diffraction experiments under quasi-isentropic ramp compression.
Read more

An international team, including a researcher from Lawrence Livermore, reports the oldest ancient environmental DNA (eDNA) record to date, describing the rich plant and animal assemblages of the Kap København Formation in north Greenland that existed 2 million years ago.
Read more

Lawrence Livermore scientists create vertically aligned single-walled carbon nanotubes on metal foils, which could be a boon for energy storage and the electronics industry.
Read more

Following a 2021 publication in which LLNL engineer Jon Lind and team detailed a new method for understanding how material responds to extreme loading conditions, a new paper with lead author Matt Nelms modifies the experimental design to make it more generally applicable.
Read more

PEOPLE

Sue Marlais is named LLNL's chief information officer.
Read more

Charles Slama becomes the new deputy principal associate director for Operations for Weapons and Complex Integration.
Read more

LLNL's Shalom Jewish Community (ShalomJC) employee resource group hosts a Chanukah celebration in the Central Cafeteria, and are joined by participants from LLNL's American Indian Activity Group (AIAG), who share traditions connected with their cultural celebrations.
Read more

Veterans in Energy, Technology and Science host a Toys for Tots drive.
Read more

DoD and National Security Council officials visit the Lab.
Read more

Brad Roberts, director of the Center for Global Security Research at LLNL, receives the Order of the Rising Sun, an honor awarded by the prime minister of Japan to people who have rendered distinguished service to the nation. The honor is rarely awarded to citizens of countries other than Japan.
Read more

Officer Tobin Ferrari adjusts his gear after a day of training. He is one of the Lab's lead Field Training Officers.

"I love working here — I believe in the Lab's mission"

– Officer Tobin Ferrari

LNL hosts Noguchi Yasushi, consul general of Japan, and Noritoshi Kurokawa, consul for Science and Technology, both from the Consulate of Japan in San Francisco.
Read more

Fang Qian, an LLNL materials scientist specializing in biogas-emission mitigation, receives Global Security's Embracing Meaningful Risk Award for her and her team's work on a biogas bioreactor Technology Commercialization Fund project.
Read more

OPERATIONS

LLNL employees, along with Lawrence Livermore National Security (LLNS), LLC, donate more than $3.6 million to non-profit organizations via the annual employee charitable giving program, the Helping Others More Effectively (HOME) Campaign.
Read more

The Lab celebrates the holiday season through a virtual presentation by Lab Director Kim Budil and the senior management team and employee receptions at the West and Central cafes.
Read more

Livermore Information Technology releases an additional notification category for the Action Items button on the myLLNL "User Bar." The additional notification category is for mobile devices and will display if an employee has an LLNL-managed mobile device that is, or is soon to be, out of compliance.
Read more

Newsline features A Day in the Life: LLNL's Security Police Officers.
Read more

Certified Unified Program Agency Inspectors from the Livermore–Pleasanton Fire Department complete their annual inspection of the Livermore Site.
Read more

The Lab offers tips for safe and inclusive holiday gatherings.
Read more

LLNL's Center for Global Security Research partners with the University of California Institute on Global Conflict and Cooperation and the Office of National Security and International Studies at Los Alamos National Laboratory to establish the Postdoctoral Fellowship in Technology and International Security.
Read more

The Return to New Normal (RTNN) website, as well as the RTNN email, is officially retired on Dec. 21, 2022. Important COVID-related resources, such as safety and vaccine information and the Lab's COVID-19 Code of Conduct, will continue to be available.
Read more

This issue of *Newsline* was produced by the Public Affairs Office. It represents a sample of the science and technology, people and operations highlights of the year. It is available on the LLNL website.

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